BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554

In the Matter of:	(	
	(	
A National Broadband Plan for Our Future	(	GN Docket Nos. 09-47, 09-51, 09-137
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COMMENTS BY CONNECTED NATION

THE CONTRIBUTION OF FEDERAL, STATE, TRIBAL, AND LOCAL GOVERNMENT TO BROADBAND, NBP Public Notice # 7

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TABLE OF CONTENTS

INTRODUCTION:

> "The support Connected Tennessee has received from the Governor's administration, from the Tennessee Legislature and from county leaders across the state has been a key element in the success of this program. The interaction among state and local government has been and will continue to be an integral part of making access to broadband a reality for all Tennesseans."
>
> – Michael Ramage, Executive Director of Connected Tennessee, a two-and-a-half year old statewide broadband initiative spearheaded by Tennessee Governor Phil Bredesen and supported by dozens of other Tennessee state and local government officials

For over seven years, Connected Nation has worked with state and local government partners to identify and implement best practices that can spur technological growth and usage, with the goal of improving the economy and quality of life.

As the Commission continues to develop the National Broadband Plan called for in the American Recovery and Reinvestment Act, Connected Nation is pleased to be given the opportunity to continue offering testimony from its experiences and success. This document demonstrates the many ways in which state, local, and tribal governments are integral parts of the ongoing national effort to improve broadband in the United States.

Broadly stated, based on its experience, Connected Nation is convinced that state, local, and tribal governments are the necessary drivers of most successful broadband initiatives. For several years, Connected Nation has provided input to various branches of the federal government, advocating that optimal federal efforts in broadband will center on:

- Recognition of the critical role of public-private partnerships in broadband expansion;
- Federal enabling of state/local response to broadband deployment and demand aggregation; and

- Recognition of the key role non-profits play in program implementation.

Connected Nation's comprehensive broadband initiatives always include the engagement of state, local, and tribal leaders, in addition to the creation of stakeholders from several other sectors of a community, including the business community, telecommunications labor organizations, K-12 education, the health care sector, libraries, the higher education community, community-based organizations, the tourism sector, local parks and recreation, and the agriculture sector.

Rene True, Executive Director of ConnectKentucky, which has been working in Kentucky since 2002, states:

> "A broadband program, as with politics, is all local. ConnectKentucky's experience shows that when there is a healthy and sincere engagement by local government leaders, opportunities turn into broadband expansion and adoption progress.
>
> As ConnectKentucky spreads limited resources to assist with broadband infrastructure projects, a key requirement before engaging technical resources is the buy-in and support of local government. Several years of boots on the ground experience across the Commonwealth indicates that it is better to have strong local government support for a project than any other ingredient. Once a commitment is made at the local level, all other barriers are overcome through hard work.
>
> For example, ConnectGRADD is a wireless broadband project in seven west Kentucky counties that is successfully deploying broadband to unserved areas by using an interlocal agreement among the counties, a commitment to secure state and local funds, cooperation securing government owned vertical assets for the network and removing other barriers to success. The effort is driven by grassroots support, not by a state level dictate to develop a broadband project in the seven county area.
>
> State support is important when providing dedicated resources and technical assistance, not often available to rural communities with unserved areas. By providing or funding objective technical resources and broadband mapping tools, the states play a key support role creating the atmosphere for broadband infrastructure projects.
>
> In Kentucky, that commitment came in the form of grants to fund ConnectKentucky broadband supply-side assistance programs. States' agencies and officials can play a deeper role focusing attention on broadband adoption programs.
>
> An example is the CyberSafeKY program anchored by the Kentucky Attorney General's Office in partnership with the Kentucky Department of Education and ConnectKentucky. The bully pulpit of the Attorney General's Office provides for easier entry to training

> venues and attracts increased media attention to highlight the message of safe Internet access for our kids. State and local support for broadband initiatives are crucial to success."

Engagement of this comprehensive sampling of state and local stakeholders empowers states and communities to drive the creation of a technology strategy that can most effectively respond to each individual community's needs.

The goal of ubiquitous broadband and a U.S. broadband adoption rate of 100% will require far more resources than can be mustered by any governmental entity operating alone. Any solution will require a grassroots, one-to-many approach. By respecting the principle of local control and decision making, and by enabling a state/local response to improving broadband, the Commission can most effectively and efficiently direct federal resources and strategies.

In this specific request for comment, the Commission asks questions that strike, in a comprehensive manner, to the heart of Connected Nation's statewide broadband initiatives. State and local governments have worked hand-in-hand with Connected Nation initiatives to drive deployment, increase adoption, help the disadvantaged, and spur investment. Connected Nation will address the Commission's request for comment by showcasing the multiple ways that state, local, and tribal leaders must play a part in any successful broadband initiative.

Connected Nation is a non-profit organization that grew out of a successful pilot initiative called ConnectKentucky, which is working toward the universal availability of broadband services in the state of Kentucky.[1] Connected Nation believes that no community should be left behind and

[1] Senator Richard Durbin has said: "Since its formation in 2001, Connect Kentucky has brought state government, providers, technology companies, and economic development units together to build one of the most innovative organizations in the country. . . . On a budget of only a couple million dollars per year, this organization has become a driving force of economic development and telehealth and education in the State of Kentucky." Sen. Richard Durbin, Floor Statement: Increasing Broadband Access to Improve Competitiveness (Apr. 24, 2007) (available at: http://durbin.senate.gov/showRelease.cfm?releaseId=280899).

that it is the responsibility of government and policymakers to ensure that all communities and individuals have the opportunity to participate in the Information Economy.[2]

Importantly, Connected Nation has learned that the most effective means of doing so is to enlist and coordinate the efforts of grassroots community organizations, the educational community, the private sector, and local and state public sector officials by providing them with information about where broadband is lacking or unavailable and spurring these forces into action. Connected Nation creates strong, community-based, public-private partnerships that are determined to act on those ideas and turn them into goals and measurable realities.

Connected Nation's engagement with ten states in the U.S. has, to date, been driven by interest and commitment from broadband leaders at the state and local levels of government.

Tom Fritz, the executive director of Connect Ohio, states the following in regard to the progress that has been made during a two-year old statewide broadband initiative in Ohio spearheaded by Governor Ted Strickland:

> "Often, local solutions are best enabled by local legislators and agencies who understand the local environment best. In Coshocton County, Ohio, county commissioner Gary Fischer and County IT Coordinator Jon Mosier worked with the Director of Ohio's Multi-Agency Radio Communication System (MARCS) Darryl Anderson to gain access to state public safety towers and were able to offer this valuable local resource to local providers, who then invested in new coverage for unserved residents in the county.
>
> U.S. Congressman Zack Space was able to leverage FCC investments in local health care infrastructure to drive the creation of a regional proposal for the coverage of the last-mile needs in a 32-county region.
>
> Port Authority officials in Medina County are currently driving a project that will provide fiber infrastructure to unserved residents while also upgrading the quality of broadband to local business districts – driving new investment in job creation.

[2] As Commissioner Deborah Taylor Tate stated, "our rural and less-populated states and regions should not be left off the Information Super-Highway, and thanks to innovative thinking by groups like Connected Nation, it looks like they won't be." Commissioner Deborah Taylor Tate, "Broadband to the Home: Broadband to America," Speech to Broadband Properties Summit (Apr. 30, 2008) (available at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-282030A1.pdf).

> Ohio State Senator John Carey has provided valuable insights as the Chairman of Ohio's budget committee and a former Mayor of an underserved Appalachian community. His involvement with our (Connect Ohio) planning teams and the Ohio Broadband Council will help identify incremental funding sources for local projects across the state.
>
> In southern Ohio, Local Development Districts have been working together with the Appalachian Regional Commission (ARC) and the Governor's Office of Appalachia to ensure that the communities they serve integrate their plans with one another. County commissioners, who serve on the boards of these Local Development Districts, are often the best advocates for outlying areas, since local business leaders, hospitals, librarians and others are often concentrated in the more populated areas which tend to be better served by broadband providers. The combination of regional oversight with local problem-solving ensures the best use of funds and the quickest possible rollout of services.
>
> Without the in-depth involvement of state and local government leaders like these, Connect Ohio would have had a much harder time generating the success we've seen so far."

The Connected Nation model, which has received considerable attention and praise from both the Legislative and Administrative branches of the Federal government as well as across numerous state governments, is built upon a foundation that includes a non-profit organization that facilitates broadband initiatives which take action on a state-wide basis, with active participation from state government and local government leaders in each and every county of a state.

This model, with binary and symbiotic focus on both the supply of and demand for broadband services, uses market-forces combined with targeted state and local government resources to drive deployment, map broadband inventory and identify coverage gaps, sustainably increase adoption by households in every county of each state, leverage extensive consumer research into technology trends, and to tackle research-identified barriers to adoption through digital inclusion programs.

In each state where it operates, Connected Nation embarks upon a comprehensive approach focusing on demand-side and supply-side aspects of the broadband market.

This process has four core components: First, Connected Nation works in collaboration with broadband providers to collect supply-side network information that it translates into granular, statewide maps of broadband availability. Second, this supply-side information is combined with information about demand side factors through local market research. The goal of this research is to better understand key barriers to broadband adoption at the community level and to evaluate how broadband services and applications are affecting businesses and households where they are in use. Third, the mapping and research activities provide necessary information to effectively undertake comprehensive, grassroots demand-stimulation efforts that engage community leaders in the development of a pragmatic broadband policy plan. Each such plan is aimed at tackling the barriers to adoption and improving broadband use in each particular community. Fourth, Connected Nation focuses on improving technology literacy, awareness, and computer ownership. Our research has consistently shown that lack of a computer is the number one barrier to Internet adoption. Connected Nation's No Child Left Offline®/Every Citizen Online ®/Computers 4 Kids ® digital inclusion program tackles this problem directly by garnering state and private sector resources to bring computer equipment to low-income children and other disconnected populations. Community and education efforts such as No Child Left Offline® have the effect of generating demand for broadband services in previously unserved areas. In turn, this increased demand spurs additional private sector broadband investment.

Previously, as part of the Commission's on-going proceeding to craft a National Broadband Plan, Connected Nation filed extensive comments on the model it has implemented with and on-behalf of several states, which has been honed over the past five years to be scalable and replicable. For a detailed review of this model and the experience in various states, please see "Connected

Nation, Inc. Comments On A National Broadband Plan of Our Future, G.N. Docket 09-51 at http://fjallfoss.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6520220269

I. STATE, LOCAL AND TRIBAL GOVERNMENT E-GOVERNMENT SERVICES ARE "KILLER APP" TO DRIVE BROADBAND ADOPTION

The Commission seeks comments on the needs for broadband in **Section 1. E-government and civic engagement.** E-government services, or the use of the Internet to access government information and services, is a vital online tool for many residents, and one that is growing in importance as more government agencies provide a greater variety of online services to clients, businesses, and other governmental agencies. Government offices at the federal, state, and local levels offer a variety of e-government services, allowing residents and businesses to save time and money by conducting numerous tasks online, from renewing driver's licenses and learning about city council meetings, to online bidding, conducting government procurement processes, or searching online for zoning laws that can affect business plans. The opportunity to conduct these increasingly diverse tasks online is already generating economic benefits for federal, state and local governments, as well as saving citizens and businesses, time and resources. For example, the implementation of just one e-government service (USA Service) saved the federal government over an estimated $16 million in FY 2008 alone.[3]

One important component of the Connected Nation model is to promote the expansion of existing e-government services among consumers and business, by conducting awareness and educational campaigns about its benefits. Connected Nation also aims to encourage the expansion of e-government services provided by local government. This is one of the key goals of our engagements in communities across a state.

In order to understand how e-government services are affecting citizens and the private sector, Connected Nation's broadband stimulation program in the State of Tennessee, Connected Tennessee, has compiled survey data since July 2007 exploring factors affecting broadband

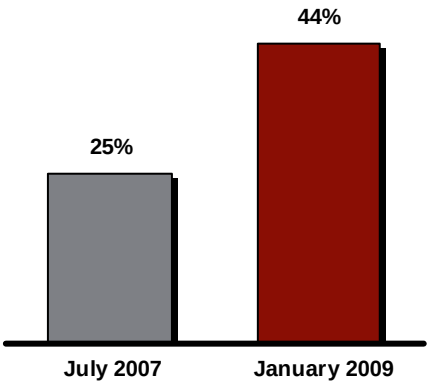
[3] *Report to Congress on the Benefits of the President's e-Government Initiatives (Fiscal Year 2009).* http://www.whitehouse.gov/omb/asset.aspx?AssetId=698

expansion and, in particular the use of e-government services. We present some of these results in this section. These statistics showcase the rapid increase in the use of federal, state and local government services by citizens and businesses in Tennessee.

Trends in e-Government Services among Citizens

Connected Nation research shows that a growing share of both residents and businesses rely on their home broadband connection to stay in touch with local, state, and federal government agencies. In January 2009, Connected Tennessee's Residential Technology Assessment showed that 44% of all Tennessee adults use their home broadband connection to conduct e-government activities (figure 1).[4]

Figure 1.
Tennessee adults who use broadband for e-government services

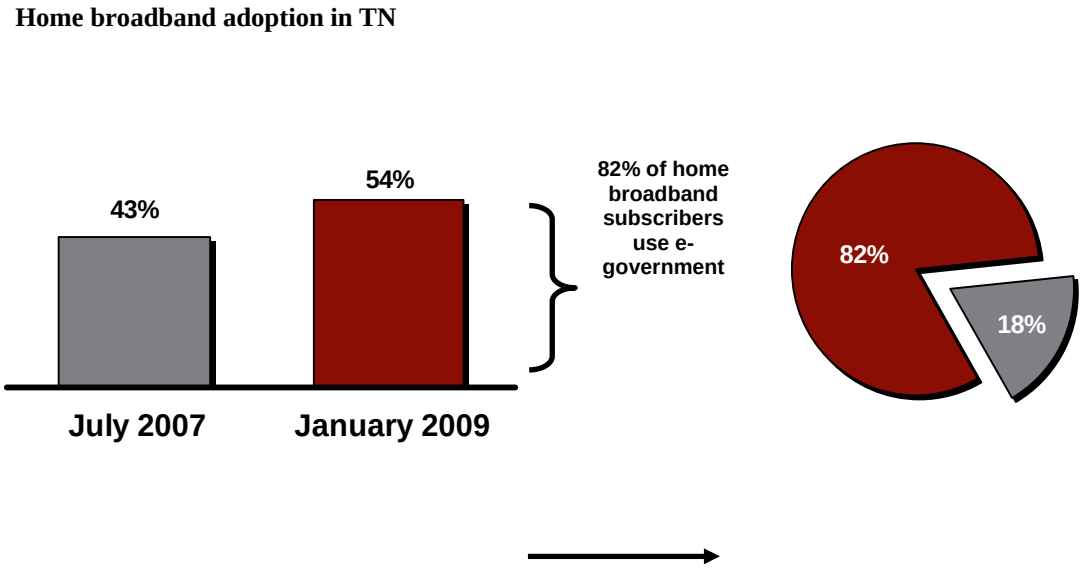


This represents a 76% growth rate in the adoption of e-government from July 2007 when only 25% of adults used their home broadband services to access to e-government services. More than four out of five (82%) home broadband subscribers, representing more than one million Tennessee households, report using e-government services (figure 2).[5]

[4] Source: July 2007 and January 2009 Tennessee Residential Technology Assessments. n=9,513 TN residents in 2007 and 1,200 TN residents in 2009. e-Government activities include contacting government officials, searching for government service and policy information, interacting with state or local government, and making online transactions with the government. January 2009 survey results were used due to a change in methodology in the way that application questions were asked in the July 2009 Connected Tennessee Residential Technology Assessment.

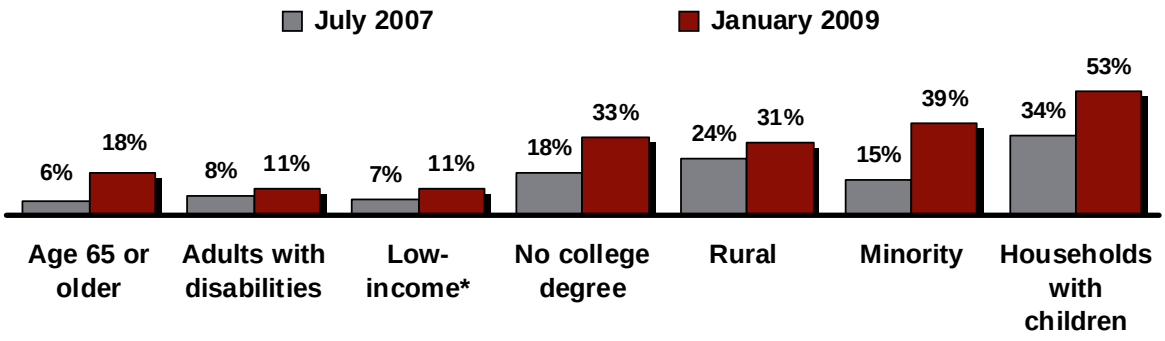
[5] Source of estimated number of households: United States Census Bureau, 2008 American Community Survey. www.factfinder.census.gov. Based on 2008 estimated number of households in Tennessee (2,434,683). Source of data on e-

Figure 2.
Percent of home broadband subscribers in Tennessee who use e-government



A growing number of different demographic groups rely on their home broadband service to connect with their local, state, and federal government offices (figure 3).[6]

Figure 3.
Percent of all Tennessee residents who use home broadband service to access e-government services



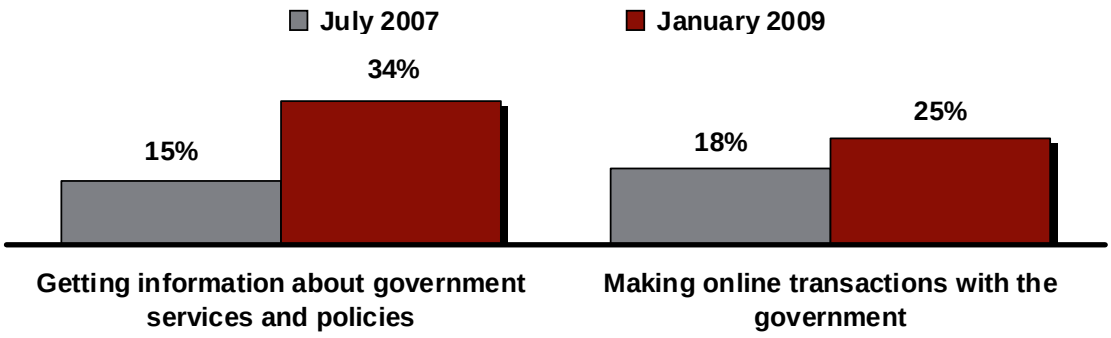
government usage among TN broadband subscribers: July 2007 and January 2009 Tennessee Residential Technology Assessments. n=9,513 TN residents in 2007 and 1,200 TN residents in 2009.

[6] Source: July 2007 and January 2009 Tennessee Residential Technology Assessments. n=9,513 TN residents in 2007 and 1,200 TN residents in 2009. *Low-income=households where the annual household income is less than $25,000.

Of particular note are the demographics of adults age 65 and older and minority adults. These are two demographic that normally lag behind the national average yet they experienced more than 100% growth in their use of home broadband services to access e-government services during the 18 months between July '07 and January '09. Also of note, in 2009, one-third of all adults without a college degree, as well as 53% of all households with children, report using a home broadband connection to access e-government services. Average growth in usage in e-government services for the entire population during the same period was 76%, suggesting that these demographic groups, once they are online are adopting e-government applications rapidly.

Consumers who access e-government services through their home broadband connection reported that they do so for a number of reasons, most of which fall into two distinct categories: using the Internet to learn about government services and policies, and conducting online transactions with government offices (figure 4).[7]

Figure 4.
Type of e-government applications accessed by Tennessee adults using a home broadband connection



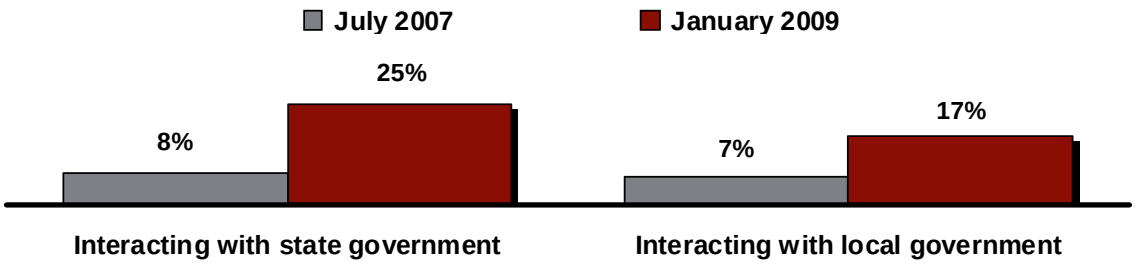
More than one–third of all Tennessee adults (34%) said that they use their home broadband service to get information about government services and policies, which is a 127% increase

[7] Source: July 2007 and January 2009 Tennessee Residential Technology Assessments. n=9,513 TN residents in 2007 and 1,200 TN residents in 2009.

since July 2007. One out of four Tennessee adults (25%) in January 2009, up from 18% in July 2007, said that they interact with their state government officials and conduct online transactions with government offices, including downloading forms and applications, as well as e-filing their state and federal taxes. Expansion of these services is already providing great value to government agencies and broadband users. For example, nationally, the IRS reported that in 2007 it received 4.77 million e-filed tax returns through its Free File online services, saving United States taxpayers over $11 million.[8]

The expansion and usage of e-government services is likely to continue experiencing rapid growth not only as a way for residents to connect with the federal government, but with their state and local government officials as well. Between July 2007 and January 2009, the use of broadband-enabled e-government applications to interact with state and local government has increased rapidly. In January 2009, 25% of Tennessee adults reported using their home broadband connections to interact with state government, up from 8% in July 2007, an increase of over 200% during the 18 month period (figure 5).

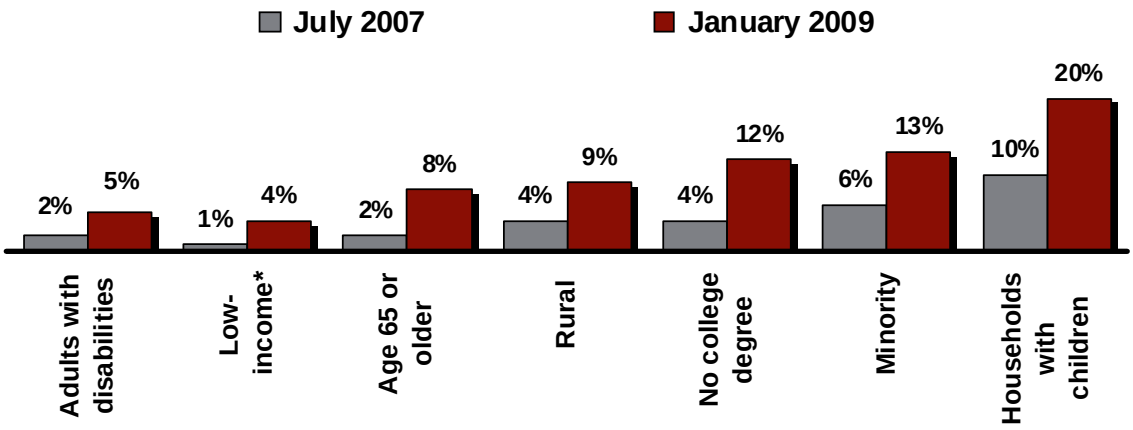
Figure 5.
Type of e-government applications accessed by Tennessee adults using a home broadband connection



[8] *Report to Congress on the Benefits of the President's e-Government Initiatives (Fiscal Year 2009).* http://www.whitehouse.gov/omb/asset.aspx?AssetId=698

Use of local e-government service applications have increased by 142% during this period, from 7% to 17%. Using broadband to search for information about local events, accessing city and county websites to voice an opinion about community issues, or a host of other grassroots political activities, empowers a wide and growing variety of individuals to participate in their local government (figure 6).[9]

Figure 6.
Tennessee residents who use home broadband to access *local* e-government services



Growth in local e-government services has grown significantly among demographic groups with broadband adoption patterns lagging behind the average population. Use of a home broadband connection to access local e-government services more than doubled and in some cases tripled for the following groups: adults with disabilities, low-income adults, adults over age 65, rural residents, adults with no college degree and minority populations. The fact that these particular demographic groups rely on their home broadband service to access government services highlights the importance of making affordable broadband available to every person, as well as the need to ensure that offered services are accessible to everyone. For instance, a recent report

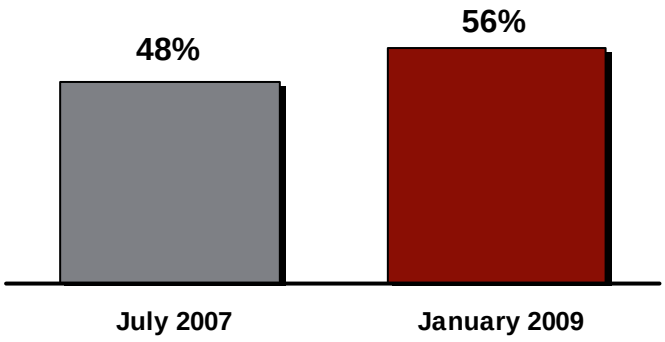
[9] Source: July 2007 and January 2009 Tennessee Residential Technology Assessments. n=9,513 TN residents in 2007 and 1,200 TN residents in 2009. *Low-income=households where the annual household income is less than $25,000.

from the Brookings Institute found that 64% of government websites are written at the 12th-grade reading level or higher (much higher than that of the average American), while only 25% of federal websites and 19% of state websites are accessible to adults with disabilities.[10]

E-Government Services and Businesses

In addition to the benefits that residents experience from access to e-government services, businesses also are able to run more efficiently and profitably by accessing the resources that many state and federal websites provide. In Tennessee, 56% of businesses (representing approximately 77,000 businesses statewide) reported that they access Tennessee state government websites (figure 7).[11] This figure has increased by eight percentage points since July 2007.

Figure 7.
Tennessee businesses that visit
Tennessee state government websites

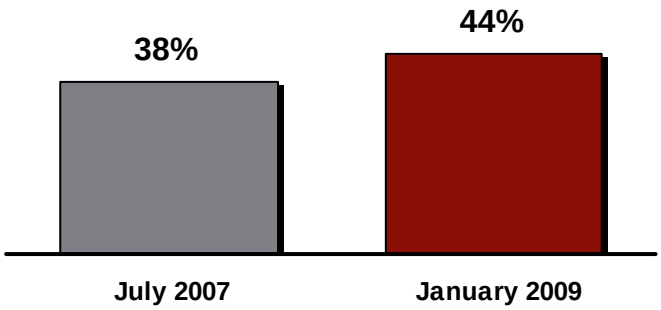


The share of small Tennessee businesses (those with four or fewer employees) that access state websites grew at a rate slightly below the state average (figure 8).[12] As a result, the share of

[10] West, Darrell, *State and Federal Electronic Government in the United States, 2008.* www.brookings.edu/~/media/.../0826_egovernment_west.pdf
[11] Source: July 2007 and January 2009 Connected Tennessee Surveys of Businesses. n=812 TN businesses in 2007 and n=810 TN businesses in 2009.
[12] Source: July 2007 and January 2009 Connected Tennessee Surveys of Businesses. n=288 small TN businesses in 2007 and n=297 small TN businesses in 2009.

small businesses that accesses state websites continues to be slightly lower than the state average at 46%.

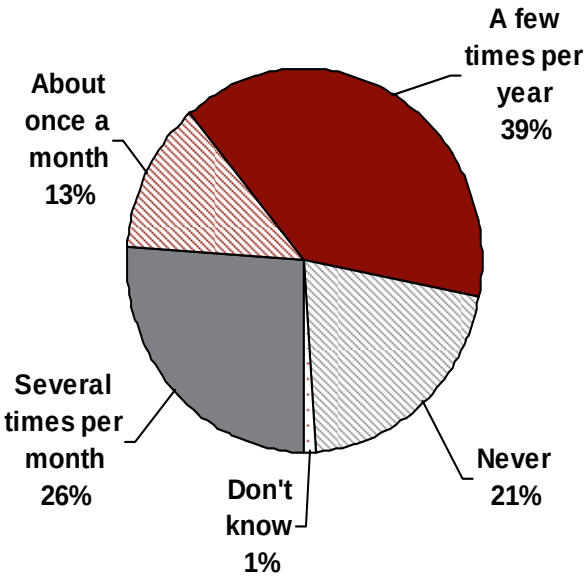
Figure 8.
Small Tennessee businesses
that visit Tennessee state government



The first step in getting businesses connected to the variety of services offered through government websites is for them to be connected to the Internet. In January 2009, 67% of Tennessee businesses reported using broadband service, up from 55% in July 2007.[13]
Of the Internet-connected businesses in 2009, more than three-quarters reported that their employees use Tennessee state websites for business purposes, including 26% whose employees visit these websites on work-related matters several times per month (figure 9).[14]

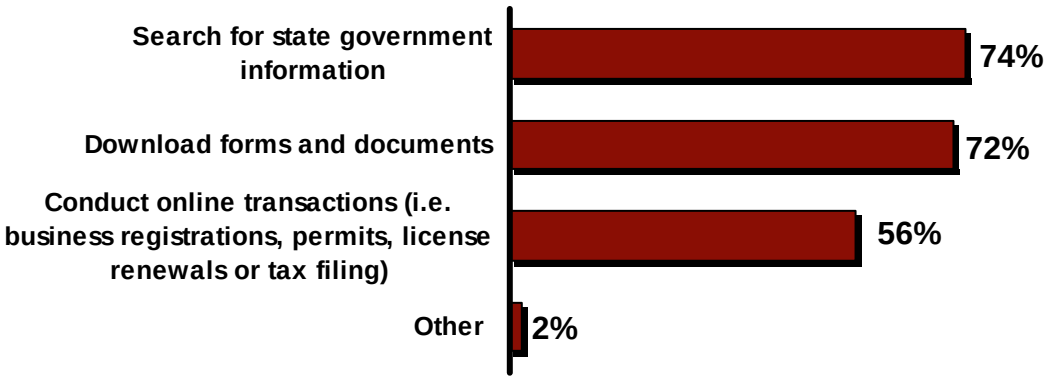
[13] Source: July 2007 and January 2009 Connected Tennessee Surveys of Businesses. n=812 TN businesses in 2007 and n=810 TN businesses in 2009.
[14] Source: January 2009 Connected Tennessee Business Technology Assessment. n=645 Internet-connected Tennessee businesses.

Figure 9.
How often employees at Internet-connected Tennessee businesses



The top reason for accessing these state websites is to search for information, followed closely by downloading forms and documents, and conducting online transactions, such as filing taxes, renewing licenses, and filing for business registrations or permits (figure 10).[15]

Figure 10.
Applications used by Tennessee businesses that visit state websites



[15] Source: January 2009 Connected Tennessee Business Technology Assessment. n=455 Internet-connected Tennessee businesses that use state government websites.

Connected Nation research shows that online access to e-government services has been growing steadily in recent years, rapidly becoming a “killer application” for broadband services: an application providing tangible value, and hence a key reason to adopt and continue using broadband access, to both citizens and the private sector.

This trend should continue and be strengthened through the promotion and investment by government in these services. It is important that all levels of government continue expanding the array of e-government services provided online, as well as the effectiveness of online e-government platforms. Such investments will trigger greater growth in e-government services, resulting in government savings and benefits for the private sector.

II. COLLABORATIVE EFFORTS WITH STATE, LOCAL AND TRIBAL GOVERNMENTS DRIVE TARGETED, EFFECTIVE DEPLOYMENT TO UNSERVED AREAS

The Commission also seeks input on ways in which non-Federal government actions, programs, and involvement can impact broadband deployment and investment. Working on behalf of state government, Connected Nation has ample experience working with both state agencies and local government in promoting, facilitating, and encouraging private-public partnerships to promote investment in broadband in areas that are unserved.

As part of our state mandate, Connected Nation engages in a partnership with local community leaders and elected officials at the county level. These efforts follow a programmatic structure that starts with data: broadband mapping to identify the gaps in the network and factors driving broadband demand or the lack thereof in each community. Connected Nation conducts state level research on the availability of broadband deployment (mapping) as well as factors affecting demand for the services that is drilled down to the county level in order to inform the tactical strategy for county and community leaders. Armed with this tactical information, Connected Nation works with local leaders to facilitate and encourage public private partnerships aimed at developing a county-wide technology expansion plan and, ultimately, encouraging broadband adoption and partnerships to expand broadband deployment.

Connected Nation has learned from experience that a "one size fits all" approach is not effective for creating local broadband plans if communities are to effectively and sustainably fill existing broadband deployment gaps. For example, the plan for a mountainous, mining community in Eastern Kentucky will be substantially different than the challenges faced in the farming communities of northern Ohio.

For an example of a customized county level technology assessment study conducted by Connected Nation in various states see Grainger County Technology Assessment, Tennessee, at http://connectedtn.org/_documents/Grainger.pdf

The technology assessments for any one of Kentucky's 120 counties or Tennessee's 95 counties can be found by clicking on any county at the following web links: http://www.connectkentucky.org/find_your_county/counties/ or http://www.connectedtennessee.org/ecs/counties/. County level technology assessments are currently being finalized for Ohio, based on surveys which were conducted last year, with plans to implement each Ohio county's plan over the next two to three years. The creation and subsequent implementation of these local technology assessments requires the involvement of local government officials.

This research works hand-and-glove with Connected Nation's broadband mapping process, which is done on behalf of the State. The purpose of the process is not simply to collect and disseminate data; the process is designed to spawn integrated, comprehensive, and collaborative engagement between broadband providers and the communities that they serve. The very process of creating a map in a community requires the active input of broadband providers (who have broadband infrastructure information), local governments (who have public infrastructure information like proposed roads, water and sewer lines), and business and citizens (who are the source of broadband demand).

Importantly, these localized, granular maps play a critical role in the promotion of successful local ventures to expand broadband deployment into unserved areas, which is the ultimate goal and purpose of the entire mapping exercise. Local government officials have used Connected Nation's broadband inventory maps to assist in driving broadband deployment. In a letter filed

before the Commission in last year's broadband mapping proceeding (WC No. 07-38), Hal Goode, executive director of the Springfield-Washington County Economic Development Authority in Kentucky, explained the link between on-the-ground mapping and meaningful results for communities in his firsthand account to the Commission in this proceeding. According to Mr. Goode,

> "Using the detailed maps that they create, ConnectKentucky conducted an extensive engineering assessment of our county's unserved areas, identifying vertical assets such as water towers and existing cell towers that could be used for the network. And as a result, we have been able to construct a network without building any additional towers, using our existing resources in partnership with Springfield Water and Sewer and cellular companies. It was ConnectKentucky who brought all of these players together and conducted the technical work to enable the project's success."[16]

Mr. Goode also reports on the success of this strategy, which was made viable because of the collaborative and comprehensive inventory maps created by ConnectKentucky:

> "The broadband project implementation is well underway. At project completion, over 90% of Washington County's households will have access to broadband. That's up from 50% of households just last year. Many residents and businesses are now using broadband for education, healthcare, government services, working from home, buying and selling products online, and a whole host of other activities that dramatically improves their quality of life."[17]

The experience in Springfield-Washington County is one of several success stories that could be told from around the Commonwealth of Kentucky and the other states for which Connected Nation has created detailed broadband inventory maps.

Another example is the **ConnectGRADD project**, which is the nation's largest municipal wireless broadband project in the Green River Area Development District of Kentucky. Spanning an area roughly the size of the State of Delaware, the wireless broadband project called

[16] Letter from Hal Goode, Springfield-Washington Economic Development Authority, to FCC Chairman Kevin J. Martin, WC Docket No. 07-38 (Jul. 9, 2008) (available at: http://fjallfoss.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6520033622).
[17] *Id.*

ConnectGRADD was created by the seven Kentucky counties in the Green River ADD to fill the region's broadband gaps with a wireless broadband service.

Working with local government, ConnectKentucky helped put together the RFP for the network and provided free, technical consulting services throughout the project's development. ConnectKentucky is credited by local leaders as providing great service, and the project demonstrates that ensuring that the public sector at the local level works in partnership with other stakeholders is an important component of finding technology solutions for communities.[18]

Kentucky's Coal to Broadband program provides a final look at how state government engagement, working with public-private partnerships, can lead directly to broadband deployment into unserved areas.

The Coal to Broadband project is a collaborative effort to provide high-speed Internet access to people living in the rural areas of Breathitt, Estill, Lee and Powell counties in Eastern Kentucky. The program formed a non-profit called the Breathitt, Estill, Lee, Powell Regional Technology Authority, Inc. (RTA), which will work to create and execute high speed Internet service to the four counties.

Funded through a grant from the Appalachian Regional Commission and matching multi-county coal severance funds, initial funding for the project is nearly $600,000, and is a collaboration among Breathitt, Estill, Lee, Powell Regional Technology Authority, Inc. (RTA); ConnectKentucky, the Kentucky Department for Local Government; the Breathitt County (KY) Fiscal Court; the Estill County (KY) Fiscal Court; the Lee County (KY) Fiscal Court and the Powell County (KY) Fiscal Court.

[18] Letter from Jiten Shah, Director, ConnectGRADD, to Chairman Kevin Martin, FCC, WC Docket No. 07-38 (Jul. 8, 2008).

ConnectKentucky will provide technical assistance and advisory services to the four county Regional Technology Authority. ConnectKentucky will not be a broadband provider, but will provide several key services for the project including:

1. The research, issuing and follow-up for two request for proposals (RFP), including (1) for the configuration and construction of the broadband network and (2) the solicitation of a broadband service provider;
2. Market data and research services including a public awareness and outreach campaign to gain knowledge of the wants and needs of counties' residents; and
3. Project management services including measuring project milestones and providing updates of progress to local officials.

The estimated project timeline for the completed broadband network, taking into consideration possible delays due to weather conditions and other factors, is mid-October 2010. (See also: http://www.wkyt.com/wymtnews/headlines/68919452.html)

The case studies showcased in this section provide examples of the power of state government when they stimulate engagement by local leaders in programs aimed at encouraging further broadband deployment. Working directly or with non-for-profits, such as Connected Nation, there is an important role for state and federal government in this process. Connected Nation began with broadband mapping, which is now being adopted at the national level, but it does not end with identifying broadband gaps. Rather, the Connected Nation model provides the foundation and tools to create a comprehensive and customized plan to fill those gaps. The combination of local knowledge and resources with an effective broadband map allows

broadband providers and communities to accurately mesh technology deployment with potential users of application development, all while increasing community awareness and adoption.

III. LOCALIZED TECHNOLOGY PLANNING TAILORS DEPLOYMENT AND ADOPTION STRATEGY TO EACH COMMUNITY

The Commission asks for comments on successful, existing non-Federal government initiatives that have created demand for and adoption of broadband. Connected Nation's work for a comprehensive statewide, government led model for broadband stimulation, does not end with the broadband inventory maps, survey research, or a focus on the "supply" of broadband. In fact, these projects are just the beginning of an effective demand-stimulation program. Connected Nation utilizes its research to create a community-driven technology planning process that creates demand for broadband and information technology services, which in turn drives private sector investment, thereby increasing broadband availability while improving technology use. Local government, community and business involvement is critical to the success of the Connected Nation program because, unfortunately, many of the benefits of broadband go unrecognized or unrealized, particularly in the most rural areas. Even where broadband is available, the adoption rates are often low, and low take rates mean that such areas will likely not receive the next generation of higher capacity broadband services. As a result, a key to encouraging adoption is to demonstrate how technology can impact the quality of life locally across all relevant sectors of the local economy.

Connected Nation has developed a strategy to tackle this problem through grassroots involvement called "eCommunity Leadership Teams." These teams become the point of contact between broadband service providers and local communities.

Community leaders come from key sectors, starting with local government and including other sectors such as healthcare, education, security and the local private sectors, all of whom volunteer to develop and implement technology promotion plans within their communities. In

this manner, the Connected Nation model fosters a sustainable, grassroots coalition of community leaders representing local government, education, healthcare, telecommunications organized labor representatives, businesses, libraries, agriculture, tourism, and community-based organizations.

Connected Nation brings information technology consultants that specialize in community-based technology planning that help communities effectively and efficiently leverage broadband and computer technology. Connected Nation also helps communities quantify their existing use of technology—information that is valuable in attracting private sector broadband infrastructure investment—and also helps identify alternative broadband technologies (such as WiMax) that might provide solutions in particularly hard-to-serve areas.

The goal of these eCommunity Leadership Teams is to use the dynamic mapping and research products in devising a comprehensive, community-based technology planning program. These programs result in county-level tactical technology expansion plans that provide detailed agendas for creating targeted online applications for citizen services, technology literacy programs, awareness building campaigns, and cross-sector collaboration for smart technology investments. Often plans include detailed analysis of the best means of deploying new and available technology across each of the aforementioned sectors. The overarching purpose of these eCommunity Leadership Teams is to create and aggregate demand for broadband, identify locally relevant applications or solutions, foster cooperation across both private and public sectors to ensure that the community's needs are fully addressed, and create local awareness of the opportunities of broadband.

These teams are the heart of the success of Connected Nation's comprehensive

strategy to promote broadband demand and stimulate private investment. Through these teams, communities are engaged in their digital futures and take charge of practical, viable, and sustainable solutions that address the particular barriers to broadband availability and adoption in those communities.

One example of these grassroots efforts is the Strategic Technology Plan for Edmonson County, Kentucky, which can be found on our website at http://www.connectkentucky.org/NR/rdonlyres/C9A183EF-A864-45C4-8147-9300E441D63A/0/1_EDMONSONCOUNTYSTRATEGICTECHNOLOGYPLAN.pdf

The Grundy County, Tennessee local technology plan, along with other information and broadband maps specialized for Grundy County, can be found here: http://www.connectedtennessee.org/ecommunity_strategies/find_your_county/grundy/

A final example from Ohio can be found here: http://www.connectohio.org/mapping_and_research/county_profiles/

The ultimate results of these efforts, however, can be found in the countless success stories, some of which are told through our *Connected* newsletters, which can be found at http://www.connectkentucky.org/news_&_events/Publications/connected.php; or here http://www.connectedtennessee.org/in_the_news/publications/connected_newsletters/; or here http://www.connectohio.org/publications/connected/.

These community programs are successful because they build sustainable, grassroots support for broadband adoption and deployment, and because they incorporated the knowledge, needs, and expertise of each local community and local government representatives. Broadband providers will invest in networks in areas where they know that demand for their service is

present and sustainable—and the eCommunity Leadership Teams, built at their core with state and local government assistance, provide that demand stimulation and stability.

IV. STATE AND LOCAL GOVERNMENT LEADERSHIP NECESSARY FOR SUCCESSFUL EFFORT TO INCREASE BROADBAND ADOPTION (AND SHOULD BE REPLICATED)

State and local government leadership is essential for successful efforts to increase broadband adoption across communities and demographics that are being left behind in this rapidly moving digital era. In the previous sections we have described the model that Connected Nation has implemented in various states on behalf of state government, and including active participation from local government and civic leadership. In this section we describe successful programs that have evolved from these efforts and complement the overall goals of our mission.

Computer Distribution Programs Among Low Income Communities Is An Essential Tool to Overcome Key Barriers to Adoption

According to 2008 research recently conducted by Connect Ohio, 52% of households who do not have access to Internet services at home (broadband or dialup) reported lack of a computer as the primary reason for the lack of connectivity.[19] Research conducted in Tennessee and Kentucky shows similar results.[20] This data is supported by academic research that shows that education and income inequality are important factors that explain low broadband adoption rates.[21] Faced with this challenge to technology and broadband adoption, Connected Nation working with state leaders recognized that a critical part of an effective program to address the digital divide challenge had to focus on computer distributions for the poor and disconnected.

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[19] *Connect Ohio 2008 Residential Technology Assessment.* Available at: http://connectohio.org/_documents/Res_OH_06262008_FINAL.pdf

[20] ConnectKentucky, *2007 Kentucky Technology Trends: Results of the 2007 ConnectKentucky Residential Survey*. Available at http://www.connectkentucky.org/_documents/2007KentuckyTechnologyTrends_residential_3-28-08_001.pdf

[21] *See* G. S. Ford, T. M. Koutsky and L. J. Spiwak, *The Demographic and Economic Drivers of Broadband Adoption in the United States*, PHOENIX CENTER POLICY PAPER No. 31 (Nov. 2007). According to the Phoenix Center, "broadband adoption is intimately tied to demand-side factors like income inequality and education, and policies directed at those factors may be more cost effective than supply-side subsidies and regulation." *Id.* at 5.

Since its origins, Connected Nation has had the pleasure to help deliver on behalf of state government and private donors thousands of computers to low income kids and centers that serve them through our No Child Left Offline®/Every Citizen Online®/Computers 4 Kids® digital inclusion program. These programs bring together public and private partners to promote digital inclusion by placing computers in the hands of disadvantaged children and their families. The private sector promotes the program through generous donations. State government brings to the program financial support as well as the resources of multiple state agencies to help identify and locate candidates to receive computers and implement the program.

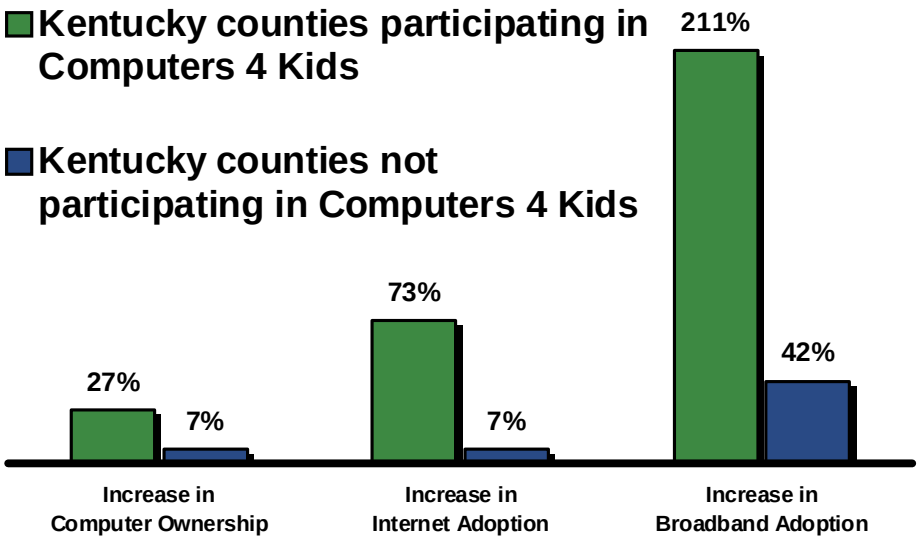
Computers 4 Kids has already delivered more than 2,000 Internet-ready computers to disadvantaged individuals and families across the state of Kentucky, and the program is now underway in Ohio. A similar program is tackling this challenge in Tennessee. Operated by Connected Tennessee and the state's Department of Human Services and the Department of Children's Services, Computers 4 Kids is scheduled to deliver 3,000 computers to underprivileged children and their families in the next three years. Since 2006, Connected Nation has distributed nearly 6,000 computers to children and community centers in need.[22]

Computers 4 Kids and its sister programs have had a dramatic impact on the lives of thousands of families. According to the ConnectKentucky 2005 and 2007 Residential Technology Assessments, computer ownership among low-income families in Computers 4 Kids counties grew nearly four times faster over the last two years than among low-income families in other counties. During the same two-year period, Internet adoption among low income families in Computers 4 Kids counties grew more than ten times faster relative to these families in other areas of the state. Broadband adoption among low-income families grew five times faster in counties that received computers through Computers 4 Kids.

[22] http://www.youtube.com/watch?v=l38Pa6IrNUk

Indeed, in the last two years, home broadband adoption among low-income families has grown by over 200% in these participating counties (Figure 11).[23]

Figure 11.
Technology Adoption Among Low-Income Families with Children



It is quite clear that programs like Computers 4 Kids have a substantial impact upon broadband adoption rates. And adoption rates are the key to ensuring that communities continue to receive next-generation broadband investment.

Effective Government Efforts to Promote Online-Safety Practices

Commonwealth of Kentucky Attorney General Jack Conway announced in October of 2009 a partnership between his office, the Kentucky Department of Education, and ConnectKentucky on

[23] Counties participating in Computers 4 Kids include the Kentucky counties of Johnson, Clay, Wolfe, McCreary, Owsley, Carter, Lawrence and Morgan. Low-income is defined as annual household income below $25,000. *See 2007 Kentucky Technology Trends, supra* n. 10, at 27.

an Internet safety partnership, CybersafeKY. This partnership will be expanding and launching new programs in the 2009 school year to educate parents and help keep children safe.[24]

As part of this partnership, ConnectKentucky's Computers 4 Kids program raised private funds to donate twenty computers and printers to three community organizations dedicated to educating and protecting Kentucky's youth and families in crisis. This is part of a $150,000 grant from the AT&T Foundation that has donated computers to more than twenty nonprofit organizations in Kentucky.

Attorney General Conway has stated that "as parents and students get back into the swing of a new school year, it's more important than ever before to talk about the dangers that exist online. Since 2008, we've visited more than 100 schools and presented our cybersafety message to 24,000 people. We've done a tremendous job getting the word out to kids. Now we're reaching out to parents to educate them about the dangers that exist online."[25]

CybersafeKY will host free regional parent workshops to instruct parents about how to use technology and monitor activity on the Internet. ConnectKentucky is providing fifty wireless printers, donated by Lexmark, as door prizes to these workshops, which will be webcast by the KY Department of Education. In addition, the Office of the Attorney General will conduct cybersafety trainings at each of the organizations that received computers from ConnectKentucky. Public-private partnerships such as this can leverage stakeholders' strengths to tackle multiple barriers to adoption in concert, providing a greater chance that the disconnected will get online and stay online.

[24] http://www.state-journal.com/news/article/4682843
[25] http://www.connectkentucky.org/news_&_events/press_releases.php

Local Libraries Play a Key Role in Connecting the Disconnected

Connected Nation recently filed comments in this proceeding regarding the importance of libraries.[26] The role that libraries play, however, are worth repeating. Connected Nation conducted surveys across the states of Tennessee and Ohio to better understand the role of libraries in the broadband age. Key findings of this survey research include:

- Significant percentages of those who normally don't subscribe to broadband – specifically single parents, minorities and low-income residents – are relying on the local library as their sole or primary Internet resource: 25 percent of single parents, 25 percent of minorities, 18 percent of low income residents, and 11 percent of people with disabilities depend on libraries for Internet connections.
- More than one-half of library Internet users (51 percent) have children at home, suggesting that a significant portion of library Internet users are children. Of this group, 42 percent do not have a broadband connected computer at home.
- Library Internet users are significantly more likely than other Internet users (those who connect at home or elsewhere) to use a number of online applications related to workforce development and education, civic engagement and healthcare.
    - Nearly half of library Internet users (46 percent) search for jobs online, compared to 29 percent of other Internet users.
    - Library Internet users are significantly more likely than other Internet users to communicate online with local government officials (25 percent compared to 14 percent.)
    - 28 percent of library Internet users communicate online with healthcare professionals, compared to 16 percent of other Internet users.

[26] http://fjallfoss.fcc.gov/ecfs2/document/view?id=7020243838

To view more data from this survey, click http://connectednation.com/_documents/LibraryApps_102809_FINAL.ppt to view the relevant graphs. To view a related video underscoring the importance of broadband and libraries, click here: http://www.youtube.com/watch?v=iz_NdjVxc1Y.

V. GOVERNMENT-LED PROGRAMS TARGETING SPECIFIC DEMOGRAPHIC GROUPS FOR BROADBAND STIMULATION ARE EFFECTIVE MEANS TO TACKLE THE DIGITAL DIVIDE

The initiatives and programs described above were designed to tackle both the broadband supply and demand challenges faced by states. Connected Nation's research has shown that these initiatives and progress are successful at increasing household broadband adoption rates.

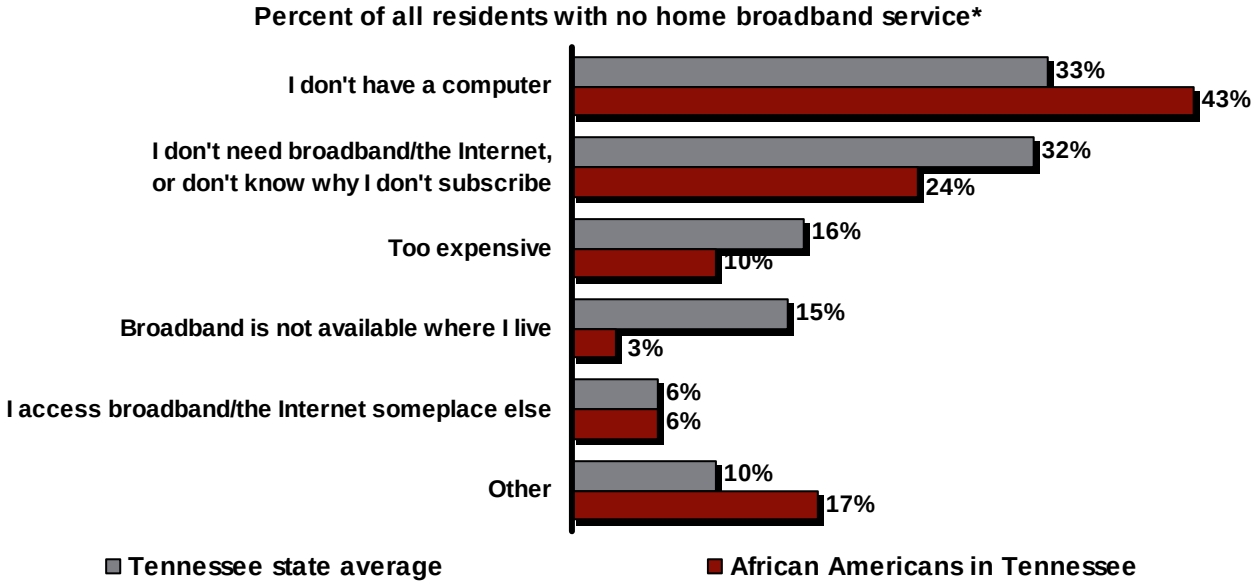
Early on in our experience working with state government to tackle the broadband challenges, Connected Nation learned that there are particular demographic groups who lag behind the general population in technology adoption. Working with state leaders, Connected Nation developed specific programs targeted to such populations. One example of these targeted efforts in the State of Tennessee focused on the African-American population.

Early research obtained at the beginning of the Connected Tennessee program in July 2007 identified African-Americans as a demographic dangerously lagging behind the overall state population in technology adoption. At the time, survey research estimated average statewide residential broadband adoption rates to be 43%.[27] By contrast, the African American residential broadband adoption rates at the time were an estimated 37%.[28] Similarly, African Americans in the state lag behind in computer ownership. While an estimated 71% of state households had a computer in the home, an estimated 60% of African American households owned a computer in 2007.

[27] Technology Assessment of Tennessee Residential Consumers, September 2007, Available at http://www.connectedtennessee.org/_documents/CTResidentialSurvey100107.FINAL.pdf
[28] Ibid.

Research also showed that barriers to computer ownership and broadband adoption among African Americans in the state showed a different pattern then amongst the overall population (figure 12[29]).

Figure 12.
Barriers to Adoption at the Inception of Connected Tennessee
(July 2007)



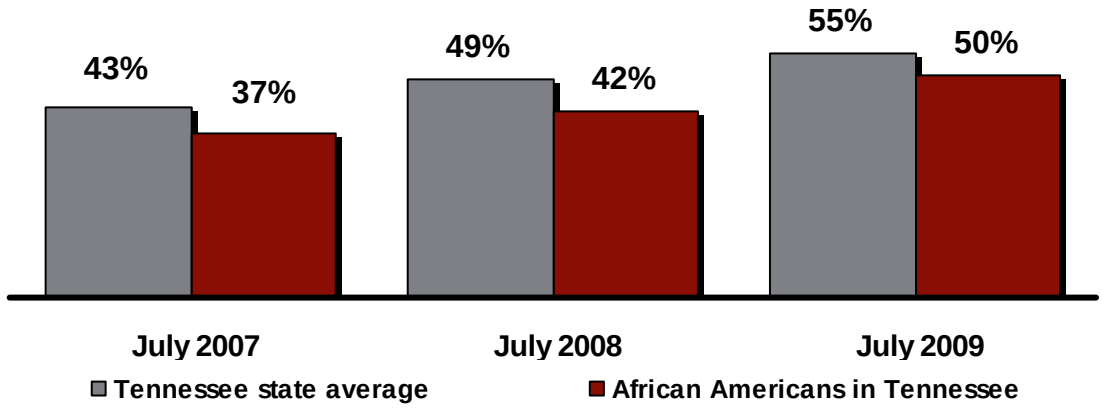
In July 2007, 40% of African Americans households without a computer stated that they did not need a computer, while 31% reported that computers were too expensive and 21% stated that they used a computer elsewhere. Further, 43% of African Americans who did not subscribe to home broadband service cited the lack of a home computer as a barrier to adoption. Nearly one-quarter of African Americans (24%) cited a perceive lack of need as a barrier, while 10% cited expense, and 3% reported the lack of availability as a barrier to broadband adoption.

[29] (n=6,174 TN residents who have no broadband connection at home, 318 of whom are African American). *Percentages do not add up to 100% because individuals could
give multiple responses.

Based on this data, Connected Tennessee and state leaders, led by Governor Bredesen, decided to implement technology and broadband stimulation campaigns targeted to African American communities in the state. The programs implemented included the afore-mentioned grassroots, educational, and technology awareness campaigns through the eCommunity Teams, as well as computer distribution programs through the Computers4Kids program, which targeted African American communities and households.

The results of these efforts have been highly successful and serve as a keen example of a state-led program for broadband stimulation that works. Broadband adoption rates among African Americans in Tennessee have experienced a marked increase, growing more rapidly than adoption rates amongst the overall population at a time when national trends show a lagging of broadband adoption growth amongst African Americans (figure 13).[30]

Figure 13
Residential Broadband Adoption Trends in Tennessee



Adoption rates by African Americans in Tennessee were 37% in 2007, 42% in 2008 and 50% in 2009, representing a 35% growth rate during the two year period from 2007-2009. By contrast, Pew Internet and American Life Project survey estimates indicate a national adoption rate among

[30] Source: July 2007, July 2008, and July 2009 Residential Technology Assessments of Tennessee
2007: n=TN 9,513 residents, 463 of whom are African American
2008: n=1,200 TN residents, 92 of whom are African American
2009: n=1,200 TN residents, 90 of whom are African American

African Americans of 40% in 2007, 43% in 2008, and 46% in 2009, an increase during the two year period of 15%, lagging behind average national growth trends.[31]

In short, data indicates that these programs work. Targeted programs that seek data to inform strategies and identify particular populations that are lagging behind and address the barriers to adoption that are most significant among these at risk populations work. Targeted educational programs, technology awareness campaigns and programs that aim to address key barriers to adoption, such as computer distribution programs for low-income households, are effective means for federal, state or local government to address the digital divide and work to universal access and usage of these technologies.

The trends discussed here are important for the policy debate. But it is also important to understand in the policy debate the effect of such policies amongst communities and individuals touched by these programs. Below we offer a few testimonials from individuals whose lives have been dramatically empowered by programs run by Connected Tennessee on behalf of the state.

- Lotez Holloway is 18-years old and entered state custody six years ago because his mother was addicted to drugs. “Lotez’s mother had sold all the furniture in the house for crack, and Lotez and his brother and sister didn’t have any food,” explains his case manager, Connor Hoke. While in the foster care system, Lotez lived in six foster homes and attended four high schools. Despite his circumstances, Lotez maintains good grades and excellent behavior at school. “Lotez is still able to have a smile on his face. He’s still able to talk about good things in his life, and he’s also able to plan for the future,” says

[31] Pew Internet & American Life Project, Broadband Research Series 2007-2009.

Connor. One of Lotez's biggest dreams recently came true when he was adopted by a family in Mt. Juliet.

- Audrey Carey was born and raised in Gallatin, TN but moved to Atlanta, GA several years ago with her four children. After living there for five years, Audrey got the call at work one day that her home had caught on fire. Her children were home, and thankfully, no one was hurt. The house, however, was destroyed. Audrey and her kids lost everything and were forced to move from place to place until finally settling into a shelter. Not long after that, Audrey packed up her four kids and all their belongings and moved home.

  The day after commenting to her mother about how badly she needed a computer for her kids, Audrey received a letter in the mail from her Department of Human Services case manager telling her she would soon be receiving a brand new computer. She had been selected based on her outstanding performance in the DHS Families First program, a program that emphasizes work, training and personal responsibility. “My kids started jumping up and down!” she says.

  Today Audrey is working at a nursing home, attending night school to obtain her GED, and preparing for massage therapy school. And thanks to her new computer, Audrey’s daughter was recently able to perform research to win an essay contest that won her a $500 prize! The family’s success is something that Audrey gives credit to her computer for…and a little help from upstairs. “I guess the Lord heard me!” she says.

- In Memphis, TN, 20 brand new Dell computers and two printers were donated to the Matthew R. Davis Resource Center on the campus of the New Chicago Community Development Corporation.

  The mission of the New Chicago Community Development Corporation (NCCDC) is to build a stronger community by revitalizing the community through housing, economic, and physical development strategies.

  "Computers 4 Kids continues to transform lives across Tennessee," said State Representative Ulysses Jones. "Computer skills are vital in today's global economy. With today's economic crisis in our country, this is a great program to help all families, regardless of income, meet educational and professional needs."

  NCCDC is a compact, mostly residential neighborhood located in the northern section of the City of Memphis. Designate boundaries encompass Chelsea on the south, Morehead to the west, Watkins on the east and the Wolf River on the north.

  In October 2001, the City of Memphis awarded (NCCDC) a Community Housing Development Organization (CHDO) designation and awarded capacity building funds. This designation by the City of Memphis was an answer to the community outcries of revitalization for the area, from the slum and blight it had deteriorated too. The capacity funds will assist in hiring staff for NCCDC and provide training in the area of housing development, board development and financial management. Today the NCCDC is able

to provide affordable housing, community service projects, safety, crime prevention and business & economic development opportunities to the community.

State Senator Reginald Tate, State Representative Jim Coley and Chief Information Officer for the City of Memphis, Joe Sanders were also in attendance at the event to show their support of the Computers 4 Kids program. Executive Director of the New Chicago CDC, Eddie Hayes, III, expressed his appreciation for the outpouring of local support and for the tremendous impact the computers will have on the program.

"We are so fortunate that the New Chicago Community Development Corporation was chosen as a recipient of the Computers 4 Kids program," said Hayes. "This charitable donation will enhance and enrich the lives of the families we serve for many years to come."

- Computers 4 Kids established a computer lab equipped with 14 brand new Dell computers at the CWA-Cayce Learning Center in East Nashville, TN. The mission of the CWA-Cayce Learning Center is to identify, address and support the long-term solutions to the educational, health, social and economic needs of those families living in the CWA Apartments and James A. Cayce Homes. The Learning Center serves as a HUD Model Center for the Neighborhood Networks initiative to connect people in poverty to the rest of the world via technology.

Nashville Mayor Karl Dean, on hand to help unveil the computer lab, stressed the importance of making technology available to all Tennesseans, regardless of income.

“It goes without saying that in today’s world, computer skills and Internet access have become essential when it comes to educational and professional resources,” said Dean. “It is equally important for young people to build the computer skills that are increasingly needed for good jobs. The computers donated by the Computers 4 Kids program will link these kids and families to a world of opportunity and help them succeed in school and in the workplace.”

Named after the first executive director of Metropolitan Development and Housing Agency, the James A. Cayce Homes is Nashville's oldest and largest public housing development. Construction on the 720 rental units began in 1941 and was completed in 1954. The development is located on 63.3 acres between South 6th and South 8th streets in east Nashville.

MDHA is and always has been committed to providing safe, decent and affordable housing for low-income persons in Nashville. To assist the families that would live in Cayce, Martha O'Bryan Center relocated its facilities to the neighborhood in 1949 while the Cayce homes were still under construction.

Fifty years later, the James A. Cayce Homes provide housing for low-income families, but many of the families who live here are part of the intergenerational cycle of poverty

and undereducation. The following statistics, from MDHA, paint a picture of many of the families who live here and turn to Martha O'Bryan Center for help:

- 1,856 residents live in the Cayce Homes, making it Nashville's largest public housing development.
- 84% of the total population is African-American.
- The average annual net income is $4,306 – a decrease of $472 from 2001.
- Women head 88% of the homes and children represent 56% of the total population of Cayce.
- The average family has three members -- a mother and two children.
- 50% of the persons age 25 and up within one mile of Martha O'Bryan Center do not have a high school education.

Typically, families living at or below the poverty line are the first to feel the effects of a softening economy. The recent economic downturn has certainly affected Cayce residents, as reflected in the decrease of average annual income and a reduction in the number of working families.

The children of Cayce attend schools within the Stratford cluster of the Metro Nashville School Systems - Warner and Kirkpatrick Elementary Schools; Bailey and East Middle Schools; and Stratford High School. These are the city's worst performing schools, both in academics and attendance. The out-of-school suspension rate at Dalewood Middle School was 31.8%; Startford High School's rate was 35.6%. These are well above the Davidson County average of 22.7% and they have risen each of the last three years.

Further, only 9% of males and 10% of females in our neighborhood complete secondary education, not even half as much as the national average.

These challenges make it even more difficult for the families we serve to become self-sufficient and break the intergenerational cycle of poverty. In times like these, the services and programs provided by Martha O'Bryan Center become critical to families living here in Cayce.

VI. CONCLUSION: HOW CAN THE FCC PROMOTE EFFECTIVE STATE, LOCAL AND TRIBAL INITIATIVES TO BRIDGE THE DIGITAL DIVIDE?

On October 10, 2008, S. 1492, the Broadband Data Improvement Act became P.L. 110-385, after having passed the U.S. Senate and U.S. House of Representatives unanimously. In addition to bipartisan and widespread support on Capitol Hill, the Broadband Data Improvement Act attracted support from a diverse group of organizations, non-profits, and companies.

Section 106 of the Broadband Data Improvement Act created the State Broadband Data and Development Grant Program, which was intended to fund comprehensive statewide broadband initiatives through competitive grants from NTIA. NTIA was directed in P.L. 111-5 to use up to $350 million to fund the State Broadband Data and Development Grant Program, in addition to creating and maintaining a national broadband inventory map.

The clear intent of Congress, in authorizing the State Broadband Data and Development Grant Program in Sec. 106 of P.L. 110-385 and then providing up to $350 million for that program in the American Recovery and Reinvestment Act, was to have this grant program work in concert with the other programs authorized and funded as the Broadband Technology Opportunities Program.

To date, the NTIA has logically focused on using the State Broadband Data and Development Grant Program to ensure that a statutory mandate for a national broadband inventory map contained in the ARRA be met by Congress' enacted deadline of February 17, 2011. However, during development of the Broadband Data Improvement Act, the State Broadband Data and Development Grant Program's activities were created to be comprehensive and co-dependent upon each other.

In fact, Section 106 of the Broadband Data Improvement Act, which establishes the State Broadband Data and Development Grant Program, can and should provide grants to state-based public-private partnerships for statewide broadband expansion programs. According the BDIA, the statewide programs shall include:

- Creation of a "geographic inventory map of broadband service" within each state. The map shall identify broadband gaps through GIS technology, based on "the geographic boundaries of where service is available or unavailable among residential or business customers." The map shall also include a baseline number of statewide households with broadband availability.
- A baseline assessment of broadband deployment in each state.
- Tracking of unserved and underserved areas within a state.
- Tracking of broadband adoption and related information technology services among residents and businesses.
- Tracking possible suppliers of broadband and related services.
- Identification of barriers to adoption among residents and businesses.
- Identification of available broadband speeds, in accordance with FCC speed tiers.
- Creation and facilitation of a local technology planning team in each county or designated region within a state. Each team shall represent a cross section of the community, including government, education, healthcare, business, organized labor, libraries, agriculture, tourism, and community-based organizations. Each team shall benchmark technology use across sectors, set goals for improved use within each sector, and develop a "tactical business plan" to reach its goals, "with specific recommendations for online application development and demand creation."

- Collaborative work with broadband and IT providers to encourage deployment and adoption, especially in unserved and low-adoption areas, through "local demand aggregation, mapping analysis, and the creation of market intelligences to improve the business case for providers to deploy."
- Establishment of programs to improve computer ownership and Internet access for unserved and low-adoption areas.
- Collection and analysis of detailed market data on the adoption of and demand for broadband and other IT services.
- Facilitation of information exchange between public and private sectors regarding adoption of and demand for broadband.

Broadband mapping was to depend on a statewide and grassroots demand-stimulation program, with local consumer research on technology trends designed to support efforts to drive deployment and increase adoption. Finally, digital inclusion programs to provide computers to disadvantaged populations were also included as part of the State Broadband Data and Development Grant program in order to tackle one of the documented greatest barriers to adoption: lack of a computer in the home.

In the Broadband Data Improvement Act, Congress states:

> "The Federal Government should also recognize and encourage complementary State efforts to improve the quality and usefulness of broadband data and should encourage and support the partnership of the public and private sectors in the continued growth of broadband services and information technology for the residents and businesses of the Nation."[32]

[32] P.L. 110-385, Sec. 102 (4)

Taken together, the Broadband Data Improvement Act and the American Recovery and Reinvestment Act contained a comprehensive broadband policy laid out by the U.S. Congress that will do much to improve broadband deployment and adoption in the United States.

The NTIA has worked swiftly to ensure that it is positioned to deliver a national broadband inventory map to Congress by February 2011, and is also working to provide grants from the Broadband Technology Opportunities Program (BTOP) for infrastructure, sustainable adoption programs, and to expand the capacity of public computing centers.

Funding and authorization for BTOP, however, is mandated by the ARRA to cease by the end of Fiscal Year 2010. Authorization will still exist for the State Broadband Data and Development Grant Program, and the Federal government should use the Broadband Data Improvement Act to ensure that state government initiatives, including those funded under the BTOP sustainable adoption program, can continue or adapt to become comprehensive and statewide efforts.

This role of enabling initiatives that are driven by the public sector at the State and Local government level, with information aggregated upward, will allow the Federal government the greatest efficiency from its allocated resources. The State Broadband Data and Development Grant Program can (and was intended to) be utilized well beyond the current Fiscal Year to fund statewide efforts that map broadband inventory, aggregate demand and grow adoption rates, drive broadband deployment into unserved and underserved areas, and conduct extensive consumer research concerning the use and demand for broadband service and related information technology services.[33]

Connected Nation has found, through its experience, that non-profit facilitation of broadband initiatives is needed in order to foster the greatest level of collaboration between the public and private sectors at the state level. Historically, engagement of both public and private sector

[33] See P.L. 110-385, Section 106.

stakeholders has been critical to the success of the broadband programs created and run by Connected Nation. Throughout the preceding comments, Connected Nation has provided input and examples on successful state and local government initiatives, programs, and participation that has positively impacted available knowledge on broadband/technology data, broadband deployment, and the rate of household broadband adoption. In many states, including those in which Connected Nation has been an active player, state, local and tribal governments have been a key driver in broadband improvement to date.

These examples described in these comments were facilitated by public-private partnerships, of which an integral part was the public sector at the state, local or tribal level. Clearly, the U.S. Congress recognized the value of public-private partnerships as it crafted the Broadband Data Improvement Act because it seeks to "encourage and support the partnership of the public and private sectors in the continued growth of broadband services and information technology." Through recognition of the value of public-private partnerships in the National Broadband Plan, as well as the key role that state, local and tribal governments play in public-private partnerships and other broadband related activities, the FCC can ensure that the Federal government will continue to support these highly beneficial iniatives.

Respectfully submitted,

/S/

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